

# EUROBODALLA COASTWATCHERS

KOALA RECOVERY PROJECT

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## DRONE SURVEY RESULTS

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## Contents

Summary .....	3
Dignam’s Creek.....	4
Tinpot .....	7
Boyne State Forest .....	8
Bodalla.....	9
Deua River Valley.....	11
Bodalla State Forest.....	14
Nerrigundah .....	16
Pollwombra .....	17
Wamban .....	20
Deua River Valley.....	21
Turlinjah .....	22
Runnyford.....	24
East Lynne.....	25
Cockwhy .....	26

## Summary

From the 3<sup>rd</sup> to the 26<sup>th</sup> of April, Lachlan Hall and Sabrina Velasco conducted 31 drone surveys in 15 locations from Cockwhy to Kooraban National Park. The surveys aimed to detect koalas, as well as other species of interest (including threatened and feral species). The drone surveys amounted to 55 hours and 19 minutes of flight time, covering a total area of 1860 hectares.

Over the course of the survey, over 475 detections were made, with 26 different species identified. The dominant species were Common Brushtail Possums (110 detections) and sugar gliders (107 detections). Koalas were successfully detected at two locations. Two detections were made at Kooraban National Park and one at Bodalla State Forest.

Other threatened species that were detected included Southern Greater Gliders (20 detections) Yellow-bellied Gliders (4 detections), and Glossy Black Cockatoos (3 detections). Of the feral species, only three detections of Sambar Deer were made at one location (Araluen Road, Deua River Valley). All species of interest have been plotted on the following [google my maps](#)

The following report presents an expanded summary of these findings, including detection times, specific locations and photos.

### Extra Information

#### Definitions:

**Plot-centroid:** The location that is roughly the center of the drone survey plot.

**Hours of flying:** The total time the drone spent in the air, not the amount of time the survey took to complete.

**Notable detections:** This includes koalas, other threatened species and feral animals.

**Flight path image:** A diagrammatic view of the path covered by the drone.

#### Attachments:

This final report is also accompanied by a series of documentation explained below.

**Total detections excel spreadsheet:** This has all the detection information, and species of interest have been highlighted. This includes times of detections and numbers of individuals for non-target species and target

**Species of interest excel spreadsheet:** This has all of the previous information, but only for the species of interest, as well as the respective land tenures (state forest/national park or private land).

**Photos folder:** Several photos have been attached for your use.

**Flight paths folder:** A folder of files of the drone's exact path have been attached as KML files

# Dignam's Creek

**SITE 1: 66 ha**

Date of completion: 04/04/2024

Hours of flying: 1hr 41min

Notable detections: Koala

Time	Latitude	Longitude	Species	Count
4/04/2024 1:04	-36.308587	149.946833	Koala	1



Photo 1: Koala



**SITE 2: 59.4 ha**

Date of completion: 03/04/2024

Hours of flying: *not supplied (technical issue)*

Notable detections: Koala

Time	Latitude	Longitude	Species	Count
3/04/2024 2:52	-36.340000	149.945401	Koala	1



Photo 2: Koala

**SITE 3: 60.6 ha**

Date of completion: 04/04/2024

Hours of flying: 1hr 47min

Notable detections: None

**SITE 4: 58.0 ha**

Date of completion: 03/04/2024

Hours of flying: *not supplied (technical issue)*

Notable detections: None

# Tinpot

Date of completion: 04/04/2024

## **SITE 1: 62.7 ha**

Hours of flying: 3hr 2min (site 1 and 2)

Notable detections: None

## **SITE 2: 58.5 ha**

Hours of flying: 3hr 2min (site 1 and 2)

Notable detections: None

# Boyne State Forest

Date of completion: 06/04/2024

## **SITE 1: 58.7 ha**

Hours of flying: 1hr 39min

Notable detections: None

## **SITE 2: 60.4 ha**

Hours of flying: 1hr 56min

Notable detections: None



# Bodalla

Date of completion: 07/04/2024

## SITE 1: 59.1 ha

Hours of flying: 2hr 28min

Notable detections: None

## SITE 2: 65.2 ha

Hours of flying: 2hr 15min

Notable detections: Southern Greater Glider, Yellow-bellied Glider and single flowering gums with multiple gliders

Time	Latitude	Longitude	Species	Count
7/04/2024 21:52	-36.043287	149.9937	Southern Greater Glider	1
7/04/2024 23:28	-36.044259	149.9839	Southern Greater Glider	2
7/04/2024 23:49	-36.043921	149.9839	Yellow-bellied Glider	1
8/04/2024 0:08	-36.043845	149.9871	Yellow-bellied Glider	3



Photo 3: Southern Greater Glider



Photo 4: Thermal signatures of multiple glider species



Photo 5: Yellow-bellied Glider in a flowering gum

# Deua River Valley

Date of completion: 08/04/2024

SITE 1: 62.8 ha

Hours of flying: 2hr 17min

Notable detections: Sambar Deer (female)

Time	Latitude	Longitude	Species	Count
8/04/2024 22:06	-35.764467	149.93309	Sambar	1



Photo 6: Sambar Deer



**SITE 2: 60.2 ha**

Hours of flying: 1hr 49min

Notable detections: Sambar Deer (stag)

Time	Latitude	Longitude	Species	Count
9/04/2024 1:38	-35.76752	149.9301	Sambar	1
9/04/2024 2:34	-35.765614	149.9309	Sambar	1 (possible redetection)



Photo 7: Sambar Deer, thermal image



Photo 8: Sambar Deer

# Bodalla State Forest

Date of completion: 09/04/2024

SITE 1: 59.4 ha

Hours of flying: 2hr 29min

Notable detections: Koala (1x)

Time	Latitude	Longitude	Species	Count
9/04/2024 23:45	-36.148614	150.006000	Koala	1



Photo 9: Koala

**SITE 2 – EXTRA IN THE SOUTH: 59.6ha**

Hours of flying: 1hr 13min

Notable detections: None

**SITE 3 – EXTRA IN THE NORTH: 59.3 ha**

Hours of flying: 1hr 57min

Notable detections: None



# Nerrigundah

Date of completion: 10/04/2024

## **SITE 1: 58.7 ha**

Hours of flying: Not supplied (technical issue)

Notable detections: None

## **SITE 2: 61.3 ha**

Hours of flying: 1hr 30min

Notable detections: None

# Pollwombra

Date of completion: 19/04/2024

SITE 1: 58.8 ha

Hours of flying: 1hr 53min

Notable detections: Southern Greater Glider (x2)

Time	Latitude	Longitude	Species	Count
19/04/2024 0:09	-35.869967	150.104021	Southern Greater Glider	1
19/04/2024 0:15	-35.867604	150.102715	Southern Greater Glider	1



Photo 10: Southern Greater Glider

**SITE 2: 54.9 ha**

Hours of flying: 2hr 5min

Notable detections: Southern Greater Glider (x10)

Time	Longitude	Latitude	Species Name	Count
19/04/2024 20:53	150.069363	-35.863574	Southern Greater Glider	1
19/04/2024 21:13	150.06784	-35.864717	Southern Greater Glider	1
19/04/2024 21:37	150.069335	-35.865824	Southern Greater Glider	1
19/04/2024 21:53	150.068665	-35.866233	Southern Greater Glider	1
19/04/2024 22:08	150.066192	-35.868041	Southern Greater Glider	1
19/04/2024 22:25	150.064943	-35.869667	Southern Greater Glider	1
19/04/2024 22:27	150.064273	-35.869701	Southern Greater Glider	1
19/04/2024 22:31	150.065007	-35.870219	Southern Greater Glider	1
19/04/2024 22:34	150.06423	-35.869912	Southern Greater Glider	1
19/04/2024 22:52	150.063341	-35.871635	Southern Greater Glider	1



Photo 11: Southern Greater Glider





Photo 12: Southern Greater Glider

# Wamban

Date of completion: 20/04/2024

**SITE 1B: 59.0 ha**

Hours of flying: 3hr 23min (Site 1 and 2)

Notable detections: Southern Greater Glider (2x)

Time	Longitude	Latitude	Species	Count
20/04/2024 20:03	150.006324	-35.936252	Southern Greater Glider	1
20/04/2024 20:59	150.011192	-35.931608	Southern Greater Glider	1



Photo 13: Southern Greater Glider

**SITE 2: 60.6 ha**

Hours of flying: 3hr 23min (Site 1 and 2)

Notable detections: None

## Deua River Valley

Date of completion: 21/04/2024

### **SITE 1: 65.5 ha**

Hours of flying: 1hr 44min

Notable detections: None

### **SITE 2: 66.1 ha**

Hours of flying: 1hr 51min

Notable detections: None



# Turlinjah

Date of completion: 22/04/2024

SITE 1B: 49.8 ha

Hours of flying: 1hr 26min

Notable detections: Glossy-black Cockatoo.

Time	Longitude	Latitude	Species	Count
22/04/2024 22:33	150.066026	-36.033852	Glossy Black-Cockatoo	1



Photo 14: Glossy Black Cockatoo



**SITE 2: 60.0 ha**

Hours of flying: 1hr 45min

Notable detections: Glossy-black Cockatoo

Incidental findings: Sooty Owl, Powerful Owl, Masked Owl

Time	Longitude	Latitude	Species	Count
23/04/2024 1:14	-150.060096	-36.018962	Glossy Black-Cockatoo	2



Photo 15: Glossy-black Cockatoo's

**Incidental Findings**

Date	Longitude	Latitude	Species	Observation Type
23/04/2024	150.056831	-36.021283	Powerful Owl	Heard (over 100m away)
23/04/2024	150.056831	-36.021283	Sooty Owl	Heard (over 100m away)
23/04/2024	150.0687699	-36.0242920	Masked Owl	Seen/heard

# Runnyford

Date of completion: 23/04/2024

## **SITE 1: 65.3 ha**

Hours of flying: 3hr 33min (site 1 and 2)

Notable detections: None

## **SITE 2: 63.4 ha**

Plot centroid: -35.683649, 150.112875

Hours of flying: 3hr 33min (site 1 and 2)

Notable detections: None

# East Lynne

Date of completion: 25/04/2024

**SITE 1: 54.3 ha**

Hours of flying: 3hr and 15min (site 1 and 2)

Notable detections:

Southern Greater Glider

Time	Longitude	Latitude	Species	Count
25/04/2024 21:42	150.220914	-35.561088	Southern Greater Glider	1



Photo 16: Southern Greater Glider

**SITE 2: 62.9 ha**

Hours of flying: 3hr and 15min (site 1 and 2)

Notable detections: None



# Cockwhy

Date of completion: 24/04/2024

## SITE 1: 59.2 ha

Hours of flying: 3hr 21min (Ste 1 and 2)

Notable detections: Southern Greater Glider (1x)

Time	Longitude	Latitude	Species	Count
24/04/2024 22:30	150.278864	-35.549065	Southern Greater Glider	1



Photo 17: Southern Greater Glider

## SITE 2: 49.2 ha

Hours of flying: 3hr 21min (Site 1 and 2)

Notable detections: None